Claims

[c1]   A substrate-compiling device usable to compile a number of substrates, comprising:

an input path usable to receive a substrate to be compiled, the input path defining a process direction for the substrate;

a compiler platform usable to receive the substrate to be compiled from the input path and to compile the received substrate into a set of at least one substrate;

at least one gate usable to direct the received substrate from the input path to the compiler platform; and

a stack platform positioned below the compiler platform usable to received the compiled set of at least one substrate, wherein the compiler platform comprises:

a first shelf member, and

a second shelf member,

wherein the first and second shelf members define a surface on which the received substrate is compiled onto, the first and second shelf members movable away from each other along a second direction perpendicular to the process direction of the substrate to allow the compiled set of at least one substrate to drop to the stack platform.

[c2]   The substrate-compiling device of claim 1, further comprising

a tamper device usable to tamp against a trailing edge of the received substrate when the received substrate is compiled onto the surface to drive a leading edge of the received substrate against a registration surface of the compiling device.

[c3]   The substrate-compiling device of claim 1, wherein the first and second shelf members each include a tamping surface usable to tamp against a side edge of the received substrate when the received substrate is compiled onto the surface to laterally align the compiled set of at least one substrate.

[c4]   The substrate-compiling device of claim 3, wherein the first and second shelf members are moved laterally back and forth along the second direction to tamp against the side edges of the received substrate.

[c5]   The substrate-compiling device of claim 4, wherein the first and second substrates are moved away from each other a first distance to allow the compiled set of at least one substrate to drop to the stack platform and are moved away from each other less than the first distance when moving laterally back and forth along the second direction to tamp against the side edges of the received substrate.

[c6]   The substrate-compiling device of claim 1, further comprising a manipulation device usable to manipulate the compiled set

of at least one substrate before the compiled set of at least one substrate is dropped to the stack platform.

[c7]   The substrate-compiling device of claim 6, wherein the manipulation device includes a registration surface, the substrate-compiling device further comprising a tamper device usable to tamp against a trailing edge of the received substrate when the received substrate is compiled onto the surface to drive a leading edge of the received substrate against the registration surface of the manipulation device.

[c8]   The substrate-compiling device of claim 7, wherein the manipulation device is further usable to manipulate the compiled set of at least one substrate registered against the registration surface without having to move the compiled set of at least one substrate along the process direction before manipulating the substrate.

[c9]   The substrate-compiling device of claim 8, wherein the manipulation device further comprises an ejection device usable to move the compiled set of at least one substrate away from the registration surface and out of the manipulation device such that the first and second shelf members can be moved away from each other along the second direction to allow the compiled set of at least one substrate to drop to the stack platform.

[c10]   The substrate-compiling device of claim 6, wherein the manipulation device is at least one of at least a stapler, a hole punch, and a substrate perforator.

[c11]   A method for compiling a substrate into a set of at least one substrate, comprising:

receiving the substrate at an input of a substrate-compiling device, the substrate traveling along a process direction;

directing the received substrate onto a compiler platform comprising a first shelf member and a second shelf member that define a compiling surface;

compiling the received substrate and zero, one or more other substrates into a compiled set of at least one substrate; and

moving the first and second shelf members away from each other along a second direction that is perpendicular to the process direction to allow the compiled set of at least one substrate to drop to a stack platform that is positioned below the compiler platform.

[c12]   The method of claim 11, further comprising tamping against a trailing edge of the received substrate when the received substrate is compiled onto the compiling surface to drive a leading edge of the received substrate against a registration surface of the compiling device.

[c13]   The method of claim 11, wherein the first and second shelf members each includes a tamping surface, the method further comprising tamping the tamping surfaces of the first and second shelf members against the side edges of the received substrate when the received substrate is compiled onto the compiling surface to align the received substrate.

[c14]   The method of claim 13, wherein tamping the tamping surfaces of the first and second shelf members against the side edges of the received substrate when the received substrate is compiled onto the compiling surface comprises moving the first and second shelf members laterally back and forth along the second direction to tamp the tamping surfaces against the side edges of the received substrate.

[c15]   The method of claim 14, wherein:

          moving the first and second shelf members away from each other along a second direction that is perpendicular to the process direction to allow the compiled set of at least one substrate to drop to a stack platform comprises moving the first and second shelf members away from each other by a first distance; and

          moving the first and second substrates back and forth along the second direction to tamp against the received substrate comprises moving the first and second shelf members away from each other less than the first

distance when moving laterally back and forth along the second direction.

[c16]   The method of claim 11, further comprising manipulating the compiled set of at least one substrate before dropping the compiled set of at least one substrate to the stack platform.

[c17]   The method of claim 16, wherein the substrate-compiling device includes a manipulation device having a registration surface, the method further comprising:

tamping against a trailing edge of the received substrate when the received substrate is compiled onto the compiling surface to drive a leading edge of the received substrate against the registration surface of the manipulation device.

[c18]   The method of claim 17, further comprising manipulating the compiled set of at least one substrate using the manipulating device without having to first move the compiled set of at least one substrate along the process direction before manipulating the substrate.

[c19]   The method of claim 18, further comprising ejecting the compiled set of at least one substrate away from the registration surface, out of the manipulation device and onto the compiling surface, such that the first and second shelf members can be moved away from each other along the

second direction to allow the compiled set of at least one substrate to drop to the stack platform.

[c20]   The method of claim 16, wherein manipulating the compiled set of at least one substrate comprises at least one of at least stapling the compiled set of at least one substrate at least once, punching at least one hole into the compiled set of at least one substrate, and creating at least one perforation in at least one substrate of the compiled set of at least one substrate.